NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Activity 4.3A

1. Get 4 coins from Miss Senske (two quarters, two pennies). Record the years the coins were made below (full, 4-digit years):

PENNIES: \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ QUARTERS: \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

1. Add your data to the two class lists on the board
2. Create two lists in your calculator, one for the pennies data (call this PENNY) and one for the quarters data (call this QUART). Then enter in the class data for each type of coin (full, 4-digit years)
   1. You can do this by:
      1. Go to STAT, EDIT
      2. Move your cursor to the top of L1
      3. Scroll across until you get to a blank spot
      4. Start typing the name of the list you want to create
3. Using these two lists, calculate the following info for each type of coin:

PENNIES QUARTERS

Mean = \_\_\_\_\_\_\_\_\_\_\_ Mean = \_\_\_\_\_\_\_\_\_\_\_

Std. Dev = \_\_\_\_\_\_\_\_\_\_\_ Std. Dev. = \_\_\_\_\_\_\_\_\_\_\_

n = \_\_\_\_\_\_\_\_\_\_\_ n = \_\_\_\_\_\_\_\_\_\_\_

Min = \_\_\_\_\_\_\_\_\_\_\_ Min = \_\_\_\_\_\_\_\_\_\_\_

Q1 = \_\_\_\_\_\_\_\_\_\_\_ Q1 = \_\_\_\_\_\_\_\_\_\_\_

Median = \_\_\_\_\_\_\_\_\_\_\_ Median = \_\_\_\_\_\_\_\_\_\_\_

Q3 = \_\_\_\_\_\_\_\_\_\_\_ Q3 = \_\_\_\_\_\_\_\_\_\_\_

Max = \_\_\_\_\_\_\_\_\_\_\_ Max = \_\_\_\_\_\_\_\_\_\_\_

IQR = \_\_\_\_\_\_\_\_\_\_\_ IQR = \_\_\_\_\_\_\_\_\_\_\_

1. Look at the standard deviations of the two coins. Are they similar or is one coin’s distribution more variable?
2. Using the calculator to help you, create side-by-side boxplots of the two sets of data below.
3. **Write a few sentences** comparing the two distributions. Are there any outliers for either?
4. Looking at the two boxplots, what do they tell you about the overall age of coins? Is there a difference in the ages of quarters vs. pennies?